

Remarks:

Reconsideration of the application, as amended herein, is respectfully requested.

Claims 1 - 18 are presently pending in the application.

Claims 1, 2, 10, 17 and 18 have been amended. As it is believed that the claims were patentable over the cited art in their original form, the claims have not been amended to overcome the references.

In item 3 of the above-identified Office Action, claim 10 was objected to on the basis of an informality. The Examiner's suggested correction has been made.

In item 5 of the Office Action, claims 1 - 18 were rejected as allegedly being directed to non-statutory subject matter under 35 U.S.C. § 101. More particularly, item 5 of the Office Action stated:

Claims 1 - 18 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-18 cite a method, program, computer readable medium, and a system for generating a sequence of random number [sic] according to a mathematical algorithm which is considered as an abstract idea. In order for claims to be statutory, claims must be either include [sic] a practical application at useful or a concrete, useful, and tangible result. However, claims 1 - 18 directed to a method, program computer readable medium, and a system which solely solves a mathematical expression without regard for

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the particular practical application of that mathematical expression as generating a sequence of random number [sic] based on a covariance matrix. They also fail to produce a tangible result. In addition, claims 5 - 6 are directed to purely software per se., which lacking storage on a medium to enable any underlying functionality to occur. Also claims 9 - 12 raise an issue of preemption, which attempt to claim every substantial practical application of an abstract idea. Therefore, claims 1-18 are directed to non-statutory subject matter.

Additionally, item 6 of the Office Action, states, in part:

Applicant's arguments filed 09/11/2006 have been fully considered but they are not persuasive.

a. The applicant argues in pages 14-15 for claims rejected under 35 U.S.C. 101 that the limitation "outputting the at least one sequence of random numbers of 1/f noise" would constitute the concrete, useful and tangible result as required under 35 U.S.C. 101. The examiner respectfully submits that the step of generating the random numbers of 1/f noise would not constitute the tangible result as alleged by the applicant because the result is generated, **but does not physical stored for used in the real application.** In order for claims to be statutory, the physical or real-world application utilizing the tangible result must exist in the claims. [emphasis added by Applicants]

Applicants' have amended claims 1 and 2, one of which claims are incorporated, in whole, into every other claim of the application, to recite, among other limitations "**storing**" at least one of the generated random number of 1/f noise. As such, Applicants respectfully traverse the above rejections, as applied to the amended claims.

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More particularly, Applicants' independent claims 1 and 2 have been amended to recite, among other limitations:

A method for generating at least one sequence of random numbers of 1/f noise by a computer system, which comprises the steps of:

. . . .

storing and outputting at least one of the q sequences of random numbers of 1/f noise. [emphasis added by Applicants]

All of Applicants' remaining claims incorporate all of the limitations (i.e., depend from) either Applicants' claim 1 or claim 2. As such, all of Applicants' claims require, among other limitations, that the method for generating at least one sequence of random numbers of 1/f noise **be performed by a computer system** and that at least one of the q sequences of random numbers of 1/f noise generated, also be **stored and output.**

That at least one of Applicants' random numbers of 1/f noise is **output**, is supported by the specification of the instant application, for example, on page 21, lines 14 - 17, which state:

For each time step of the simulation of the system shown in Fig. 1, a **vector OUTPUT of the output channels 3 is calculated** for a vector INPUT present on the input channels 2 and for a vector NOISE present on the noise input channels 4. [emphasis added by Applicant]

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Further, that at least one of the q sequences of random numbers of $1/f$ noise generated is stored, is additionally supported by the specification of the instant application, for example, on page 20 of the instant application, line 18 - page 21, line 2, which, referring to Fig. 1 of the instant application, states:

The system is described by a system model 1 that is indexed as a box and describes the system behavior. **The system behavior results from input channels 2, which are also designated as vector INPUT and from output channels 3, which are also designated as OUTPUT.** Furthermore, a system-dictated noise is provided, which is present on noise input channels 4 and which is also designated as a vector or as a matrix NOISE. The matrix NOISE is present when the noise is taken into account with a plurality of channels, each column of the matrix NOISE containing a vector of noise values which are present on a noise input channel. [emphasis added by Applicants]

Additionally, the present invention is realized by a computer program. See, for example, page 18 of the instant application, lines 18 - 20. In general, vectors and matrices can only be calculated by computers if they are stored on a storage medium. All computer systems are inherently understood to include storage and output devices. Additionally, it is understood in the art that it is impossible to generate a vector on a computer without storing it. Accordingly, the storing of the output vector in a **storage medium**, containing the simulation output is, at least, inherently disclosed in the specification of the instant

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application. A person of ordinary skill in the art, from whose viewpoint it is required to view the specification, reading the instant application, would absolutely know that vectors and matrices can only be stored using a storage medium and, in fact, could not come to any other conclusion.

As such, Applicant's inventions of claims 1 and 2, and all the remaining claims, all of which reference either independent claim 1 or independent claim 2, **provide a concrete, useful and tangible output** (i.e., of at least one sequence of random numbers of 1/f noise by a computer system). As such, all of Applicants' claims are believed to be statutory subject matter under 35 U.S.C. § 101.

Further, Applicants' claims 17 and 18, which already incorporate all of the limitations of Applicants' claims 1 and 2, respectively, have been amended to recite, among other limitations:

simulating the technical system and outputting the result of the simulation. [emphasis added by Applicants]

As already shown above, the **outputting** of Applicants' random numbers of 1/f noise, is supported by the specification of the instant application, for example, on page 21, lines 14 - 17. It is believed that claims 17 and 18 provide a **further**

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concrete, useful and tangible output (i.e., the outputted **results** of the technical simulation). As such, claims 17 and 18 are even more clearly the subject of statutory subject matter.

Further, on page 3 of the Office Action, claims 1 - 18 were rejected under the judicially created doctrine of obviousness-type double patenting in view of copending U. S. Patent Application Serial No. 10/289,827. Applicant submits that a terminal disclaimer can be filed in one of the present application and co-pending Application No. 10/289,827, if the claims of the present application and the claims in the co-pending Application No. 10/289,827, remain obvious over each other at the time of allowance of either of these applications. Applicant notes that in the MPEP discussions on terminal disclaimers (MPEP § 804), the terminal disclaimer is to be filed in the later-filed application, once an application has been found to be allowable. Additionally, once the terminal disclaimer is required in the **later-filed application**, it appears from MPEP § 804 that the **provisional rejection is to be withdrawn in the earlier-filed application**. Neither of the two present cases has yet been found to be allowable. At such a time as one of the two cases is indicated as being allowable, and if the claims of the two cases remain obvious over one another, Applicants will file a

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terminal disclaimer in connection with the later-filed application, as required by the MPEP. Applicants additionally note that the present case is the earlier-filed application, including the earliest claimed priority date under 35 U.S.C. § 119 from a German Application filed on December 22, 2000, whereas co-pending patent application no. 10/289,827 claims priority under 35 U.S.C. § 119 from a German Application filed on November 7, 2001.

Applicants further reserve the right to argue differences between the inventions disclosed in co-pending Application No. 10/289,827 and the instant application, at a later date, to possibly show that a terminal disclaimer should not be required in either case.

It is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest the features of claims 1 and 2. Claims 1 and 2 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1 or 2.

In view of the foregoing, reconsideration and allowance of claims 1 - 18 are solicited.

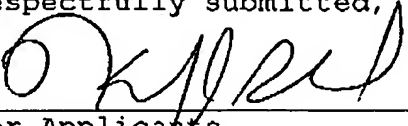
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In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

A Request for Continued Examination (RCE), and its associated fee, are being filed simultaneously herewith. If an extension of time for this paper is required, petition for extension is herewith made.

Please charge any fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Stemer LLP, No. 12-1099.

Respectfully submitted,



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